

## REMARKS

Claims 1-14 are currently pending in the application. Claim 14 has been amended.

On page 2 of the Office Action, claim 14 was rejected under 35 U.S.C. § 101 due to the claimed invention allegedly being directed to non-statutory subject matter. Applicants have amended claim 14. Therefore, withdrawal of the rejection is respectfully requested.

On page 3 of the Office Action, claims 1-14 were rejected under 35 U.S.C. § 102(b) as being anticipated by an article entitled, "On Static Compaction of Test Sequences for Synchronous Sequential Circuits," by Pomeranz *et al.* (Pomeranz).

Applicants respectfully submit that claims 1 and 10-14 are patentable over the reference, as the reference does not teach each and every element of the claim. For example, Pomeranz fails to disclose, "a selection device selecting essential test stimuli from among subsets of the set of test stimuli after mapping between the test stimuli and the faults has been established by the simulation, an essential test stimulus being a test stimulus that detects at least one fault, which is detectable by no other test stimulus in one of the subsets of test stimuli," as recited in the claims.

On page 3 of the Office Action, the Examiner alleged that Pomeranz discloses the above-identified feature of the present invention in the section entitled "compaction based on vector selection." See Pomeranz, page 4, heading 5.

Applicants respectfully submit that in contrast to the present invention, Pomeranz discloses the omission of test vectors if there exists vectors later in the sequence that allow the same faults to be detected. See Pomeranz, page 5, first column, lines 21-23. Therefore, in Pomeranz, a vector that detects the same fault as another fault is eliminated.

In contrast to Pomeranz, the present invention teaches the selection of test stimulus that detects at least one fault which is not detectable by another test stimulus. Applicants respectfully submit that the process in Pomeranz is opposed to the process of the present invention.

Applicants further submit that as Pomeranz does not disclose the selection process of the present invention, Pomeranz also does not disclose an elimination device that performs elimination after the "selection" process identified in the above argument.

Further still, according to Pomeranz, among the subsequences shown in table 6 for all faults, the subsequence (7,9) necessary to detect faults 7/0 and 15/0 and the subsequence (3,5)

necessary to detect fault 16/0 are selected, and the faults not covered by these subsequences remain in table 7 (page 4, column 2, lines 8-15).

If each subsequence illustrated in Table 6 is regarded as each test stimulus in the present invention, fault 7/0 is detectable by (7,10) that is a test stimulus other than (7,9) because subsequence (7,10) includes (7,9). In the same manner, fault 16/0 is detectable by (3,6) that is a test stimulus other than (3,5).

In contrast, the essential test stimulus in the present invention is for (as defined in claim 1) detecting a fault which is detectable by no other test stimulus. Therefore, (7,9) and (3,5) in table 6 do not correspond to the essential test stimulus, and the subsequent selection process in Pomeranz is totally different from the essential test stimulus selection process in the present invention.

In light of the foregoing, withdrawal of the rejection is respectfully requested.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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